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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,649	09/08/2003	John R. Regalbuto	4264.73185	2835
24978 7590 01/10/2007 GREER, BURNS & CRAIN 300 S WACKER DR 25TH FLOOR CHICAGO, IL 60606			EXAMINER HAILEY, PATRICIA L	
			ART UNIT	PAPER NUMBER
			1755	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/10/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/657,649	Applicant(s) REGALBUTO ET AL.	
	Examiner Patricia L. Hailey	Art Unit 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on November 13, 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/13/06, 09/26/05, 05/04/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. ***Claims 1, 2, 4, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Ebner et al. (U. S. Patent No. 6,417,133, Applicants' submitted art).***

Ebner et al. teach a catalyst comprising a noble metal such as platinum deposited on a carbon support having a BET surface area ranging from about 10 to about 3000 m²/g (col. 10, lines 16-23, considered to read upon the limitation "carbon substrate", as well as the limitations regarding the PZC values of said substrate), wherein the noble metal is deposited on the support using a solution comprising a salt of the noble metal, such as H₂PtCl₆, K₂PtCl₄ or diamminedinitrito platinum (II). See col. 16, lines 23-53 of Ebner et al.

In a preferred embodiment, reactive deposition is used to form metal particles wherein a surface of a carbon support is contacted with a solution comprising a reducing agent and a compound comprising the noble metal. Exemplary compounds include halide compounds and amine complexes corresponding to Applicants' claims 4, 5, and 7-9. See col. 17, lines 14-41 of Ebner et al.

After the carbon support has been impregnated with the noble metal(s), reduction is performed by heating the surface. See col. 19, lines 5-48 of Ebner et al.

In view of these teachings, Ebner et al. anticipate claims 1, 2, 4, and 5.

3. *Claims 1 and 3-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Fischer et al. (U. S. Patent No. 6,676,919).*

Fischer et al. disclose a method for producing catalysts by immersion coating a metallic support with at least one platinum metal. An aqueous medium which comprises at least one platinum metal complex, at least one reduction agent, and at least one complexer and which has a pH value of more than 4 is brought into contact with the metallic metal support in order to deposit the platinum metal, which is deposited in the form of discrete, immobilized particles. See the Abstract of Fischer et al.

Suitable combinations of ligands and counterions for platinum metal complexes include halides and pseudohalides, e.g., chloride (defined as "negatively charged ligands", which is considered to read upon Applicants' "anionic complex"), ethylenediamine, diethylenetriamine, pyridine, and phenanthroline (defined as "electrically neutral ligands", which is considered to read upon Applicants' "cationic complex" as recited in claim 5). See col. 5, lines 9-67 of Fischer et al., which, at lines 66

Art Unit: 1755

and 67, also disclose additional platinum metal complexes reading on the "chloro or chlorohydroxoquo" complexes recited in **claims 7-9**.

The above teachings are considered to read upon **claims 4, 5, 7-9, and 11-13**.

The deposition of the platinum metal is advantageously carried out at a pH of the aqueous medium of greater than 4, preferably greater than 6, and in particular from 8 to 12. In general, the process is carried out at temperatures ranging from 0 to 100°C. See col. 6, lines 48-51 and col. 7, lines 61-65 of Fischer et al.

At col. 7, line 66 to col. 8, line 20 of Fischer et al., exemplary metallic supports are discussed; this excerpt also discloses that the metallic supports may also contain carbon, in amounts of up to 25% by weight (col. 8, lines 19 and 20). This disclosure is considered to read upon the limitation "carbon substrate", as well as the limitations regarding the PZC values of the carbon substrate.

At col. 12, lines 8-20 of Fischer et al., the reference discloses that the "reaction time required for the deposition of the platinum metal on the metallic supports is generally from 5 to 500 minutes", and that the "platinum metal is generally bound so firmly to the metallic support that no appreciable detachment occurs as a result of contact with liquids and gases during use in catalytic reactions." This disclosure is considered to read upon Applicants' claim limitations with respect to "maintaining said contact...for a time period sufficient for said platinum metal element complex to adsorb onto said substrate..."

The catalysts prepared by the process of Fischer et al. can subsequently be activated at from 0 to 500°C; activation can be carried out in the presence of water

Art Unit: 1755

and/or hydrogen, preferably hydrogen. See col. 12, lines 42-56 of Fischer et al.; this disclosure is considered to read upon Applicants' claim limitations with respect to "heating said platinum metal complex-loaded substrate under reducing conditions at a temperature of about 200°C to about 300°C..."

In view of these teachings, Fischer et al. anticipate claims 1 and 3-13.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

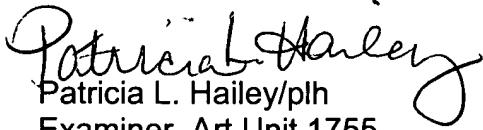
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Hailey whose telephone number is (571) 272-1369. The examiner can normally be reached on Mondays-Fridays, from 7:00 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 1700 Receptionist, whose telephone number is (571) 272-1700.

Art Unit: 1755

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Patricia L. Hailey/plh
Examiner, Art Unit 1755
January 3, 2007


J.A. LORENZO
SUPERVISORY PATENT EXAMINER